GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein – nucleic search, using frame_plus_p2n model

January 16, 2003, 16-51:22; Search time 81 8571 Seconds Run on:

(without alignments) 137.557 Million cell updates/sec

US-04-856-070-25 Title:

1 MLPLO 5 Perfect score: Sequence: RICSTIMES Scoring table:

Xgapext Yqapext Xgapop 10.0 , Ygapop 10 0 ,

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2185239 soys, 1125999159 residues Searmhod 4370478 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing

Listing first 45 summaries Maximum Match l∩∩% Minimum Match 0%

Command line parameters:

Database :

/SIDS2/geidata/geneseq/genesegn embl/NA1994 DAT.* /SIDs2/geidata/geneseg/genesegn-embl/NA1995 DAT.* /SIUSE/geldata/genese4/genese4nembl/nalgeneAT:*/SIUSE/gegetdia/genese4/genese4nembl/nalgen /SIDSZ/gcadala/geneseg/genesegn-embl/NA1989 DAT:*/SIDSZ/gcadala/geneseg/genesegn-embl/NA1990 DAT:* DAT: * DAT: * N_Geneseq_101002;* 1: /SIDS2/gegdata/geneseq/geneseq/geneseq/combd/val980;0at;* 2: /SIDS2/gegdata/geneseq/genesegn-emb/yat08;0at;* 78 to82/gogdatu/goneseg/gonesegniceet/fyAkt986_DAT;*/81D82/gogdata/goneseg/genesegnicembi/NA1986_DAT;*/81D82/gogdata/goneseg/genesegnicembi/NA1987_DAT;* /SIDS2/gcgdata/geneseq/geneseqn-embl/NA198R_DAT·* *- IA1 LavIAN/idme-npssedap/pesedep/simbpop/s8IIS/ /SibS2/gcgdata/genescg/genescgn.embl/NA1991.uAT. (3.1.81) gradata/genese-g/genesern.comt./wkiew./SIDS2/gcqdata/geneseq/geneseqn-embl/wk1993. /SIDS2/gcgdata/genescq/genescqn-embl/NA1997. /SIDS2/grgdata/genescy/genescym-embl/NA1998 /SIDSZ/gradata/geneseq/peseng/JNA149/ /SIDS2/gradata/geneseq/geneseqn-emb1/NA1984 iste inspirate appropries proposed necessary in the second section of the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section is a section of the second section of the second section is a section of the second section of the second section is a section of the second section of the second section of the second section of the secti Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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ALIGNMENTS

PESULT 1

Bucillas Sp. KSM FiS; pectic acid tyase, pectinic acid lyase; pectin; devergent, feed-processing, libre processing igent, cell wall; postic acid lyase mutajonic PCE primer SysTIAla. AAV5,4491 Standard, DNA, 17 BP. (first entry) FOR primer, mutagenic; ss. 07 - TAN - 1949 Hamilia sp AAV59481; AAV59481

bacilius sp Synthetic.

EP870834-A1

Such

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agent. The pectic acid lyase has a higher optimum reaction pH (10,3-10,7) than known Bacillus pectic acid lyases (pH 8-9.5) and so has wider industrial applications. Unlike present pectic acid lyases, the new
                                                                                                                                                                                                                                                                                 The present sequence represents a matagenic PCR primer used for introducing mutations into the pectic acid lyase isolated from microorganism Bacillus sp. KSM-P15, of the present invention. The pectic acid lyase has high pectic acid lyase activity which degrades pertin in plant cell walls and three in vegetables, and so is useful as a component of detergents, a food-processing agent, or a fibre-processing
                                                                                                                                                                                                                                                                                                                                                                                                             enzyme has a high enzyme activity, and can be produced on a mass scale.
                                                                                                                                                                                                             New Macilius portionarid lyase toseful as a detergent component, a tood-processing agent and a fibre-processing agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (48) Fibrin-stimulated, elot, treatment, vsseular disease, 88;
Fibrin deposition; adhesion tormation; primer.
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Conservative:
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 27 BP; 8 A; 5 C; 7 G; 7 T; 0 other;
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                                                                                                                                                                                                                                                      Example 14; Page 11; 29pp; English.
                                                                                                                                                                                                               New Bacillius pectic acid lyase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAV21259 standard; DNA; 36 BP.
                                        98EP-0106586.
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                                                                                                                                                                               WFI, 1998 523159/45.
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                                                                                                             (KAUS ) KAO CORP.
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                                                                                                                                                    Yoshimatsu T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24 - JUL-1989;
02 - SEP-1988;
03-OCT-1991;
                                                                   08-SEP-1997;
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                                       09-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Aliqument Scores:
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            14 -OCT - 1998
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Primers AAV21250-V21281 were used to create mutant t-PA constructs, such as variant AAW52817, where amino acids were substituted with alanine. The t-PA variants (AAW52814-W52817) created by this method and deletion
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squamous cell carcinoma, sarcoma, librosarcoma, leukaemia;
lymphocytic leukaemia, lymphoma, plasmocytoma, reticulum cell sarcoma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mutations have a higher fibrin-stimulated activity than fibrinoger stimulated activity so they will act preferentially at the site of a clot and not systemically. They can be used for treating vascular diseases and conditions or to prevent librin deposition or
                                                                                                                                                                                                                                                                             Treatment of vascular conditions or disease - using tissue plasminogen activator variant having amino acid substitutions in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   * v c o o o
                                                                                                                                                        Bennett, WF, Botstein D, Higgins DL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                     protease domain to increase fibrin specificity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 36 BP; 9 A, 7 C, 8 G, 12 T, 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
                                                                                                                                                                                                                                                                                                                                                                                  Example 2: Column 27:28: 31pp; English
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95US-0422736.
96US-0622891.
96US-0733353.
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100.00%
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                                                                                                        (GEIH ) GENENTECH INC
                                                                                                                                                                                Zoller MJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lillie J, Brown JL,
                                                                                                                                                                                                                                WPI; 1998-129803/12.
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  14-APR-1995;
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                             29-MAR-1996;
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Novel nucleic acid, used as a marker to determine the effectiveness of
                                                      using TAXOL to treat cancer cell growth in individuals -
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Claim 1, Page 276, 527pp, English.

cancer. Probles based on the markets can be used to detect transcripts or genemic sequences corresponding to the markets, in the identification of cells or tissues which mis-express the protein. Cancers which may The invention relates to 1046 movel nochric acids which are used as markers for determining the sensitivity of a cancer cell to the anticancer agent TAXOL. Cancer cells can be treated with TAXOL when they are shown to express one of the 242 sensitivity markers or the cells are shown not to express one of the 804 resistance markers. The methods can be used to determine the effectiveness of TAXOL in the treatment of cancer cell growth in an individual. The markers can be used as targets in developing anti-cancer agents such as chemocherapentic compounds. The markers can also be used as targets in developing treatments for cancer, particularly those cancers which display resistance to agents and exhibit expression of the markers. The anticancer agents developed by the movel method can be used to treat be targeted include carcinoma (e.g. squamous cell carcinoma), sarcoma (e.g. librosarcoma) legal throcasercoma) throphoma, plasmocytoma, reticulum cell sarcoma, Hodgkin's disease and tumouts (e.g. glioma). The present sequence is one of the 1046 novel cancer cell markers.

Sequence 51 BP, 10 A, 15 C, 16 G, 10 T; 0 other;

Conservative: Mismatches: Matches: Indels 100.00% 100.00% 100 00 23.00 Percent Similarity: Best Local Similarity: Aliqument Scores: Pred. No.: Query Match:

US-09-856-070-25 (1-5) x AAS60687 (1-51)

AAI77674 standard; DNA; 51 BP AA177674

AAI77674;

09-NOV-2001 (first entry)

Human silent SNP containing nucleic acid SEQ:4615.

Human; single nucleotide polymorphism; SNP; genome, gene therapy, protein therapy, vaccine, probe, diagnostic assay; detection; quantitation, restorative therapy; polymorphic; ds.

Homo sapiens

WO200140521-A2

07-JUN-2001

80-NCV-2000; 2000W0-HS32758

30-NOV-1999; 99US-0168138. 29-NOV-2000; 2000US-0726173.

(CURA-) CURAGEN COMP

Shimkets PA, Leach M;

WPI; 2001-356160/37.

```
AA171060 to AA178867 represent isolated human polymorphisms (SNPs).

AAM57314 to AAM57329 represent peptides related to human polymorphic contains single nucleotide polymorphisms (SNPs).

AAM57314 to AAM57329 represent peptides related to human polymorphic polymorphic polymorphic contains an execution of the presention. (I) and the polymorphic of protein may be used in the prevention. (I) and the polymorphic of discasses associated with inappropriate expression of polymorphic polypeptides.

For example, (i) may be used to treat disorders by rectifying mutations or deletions in a patient's genome that affect the activity of polypeptides who production of polypeptide. Additionally, (I) and its complementary sequences may also be used as DNA probes in diagnostic samples, and therefore which presence of similar nurses acids in samples, and therefore which presence of similar nurses acids in samples, and therefore which presence of similar nurses acids in samples, and therefore which presence of similar nurses acids in samples, and associate for polymorphic polypeptides. In the presence of similar nurses acids in samples, and associate for polymorphic polypeptides. The polypeptides encoded by (I) may be used as aftigues in the arithbodies may also be used as diagnostic agents for detecting the antibodies may also be used as diagnostic agents for detecting the
Polymorphic nucleic acid sequences, useful in genetic testing and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           presence of polymorphic polypeptides in samples.
                                                                                                                                                                                                       Claim 1, Page 1923, 2053pp; English.
                                                                therapy
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Sequence 51 BP, 11 A, 15 C; 14 G, 11 T, 0 other;

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                       Conservative:
Mismatches:
                Matches:
                                         Indels:
        Length:
                       166.688
100.00%
                                        100.001
                23.00
                                 Best Local Similarity.
                        Percent Similarity:
Alignment Scores:
                                         Query Match:
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US-09-856-070-25 (1-5) x AA177674 (1-51)

ò qd RESULT 5 ABN34918

ABN34918 standard; DNA; 60 BP.

ABN34918;

15-JUL-2002 (first entry)

Human spliced transcript detection oligonucleotide SEQ ID NO:7666.

Human; mouse; rat; splice transcript; detection; RNA transcript; splice variant; transcriptione; oligonucleotide library; ss.

Homo sapiens.

W0200210449-A2.

07-FEB-2002

20-JUL-2001; 2001WO-1B01903.

28 JTL 2000, 200007 221607P. 02-MAY-2001, 200108-287724P.

(COMP-) COMPUGEN INC.

Mintz L, Faigler S; Mintz E, Wasserman A, Shoshan A,

WPI; 2002-257383/30. XX DR XX

selectively hybridize to mRNAs transcribed from a transcription unit of New oligonucleotide libraries comprising oligonucleotides which

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only expressed in specific tissue under a specific pathological condition; to detect developmental specific genes; and to detect RNA transcripts and splice variants of a transcriptome of a patient suffering from a particular disorder. ARN27253 to ABN59589 represent olidonucleotide sequences from rafs, humans and mice, which are used in
                                                                                                                               The present invention describes oligonucleotide libraries for detecting messenger RNAs that populate a (sub-)transcriptome, where the (sub-)transcriptome comprises messenger RNAs transcribed from multiple
                                                                                                                                                                                                                                                                               the genome, which encodes one or more messenger RNA spiles variants. The oliqonucleotide libraries are useful for detecting menas from a quantitatively characterism profiling studies, in qualitatively or detecting RNA transcripts and splice variants of fundan or animal libraries for detecting the corresponding transcriptome, and in transcriptomes. The libraries and splice variants of fundan or animal libraries to detect transcripts of a sub-transcriptome under a particular biological or pathological state, and so allowing the detection of tissue—and pathology specific genes such as those genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the exemplification of the present invention.
N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from Wiles
                                                                                                                                                                                                           transcription units that populate a genome. The library comprises several oligonuclectides, each capable of hybridising selectively to a set of messenger RNAs transcribed from a given transcription unit of
a genome, useful for detecting tissue-, pathology-, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             at ftp.wipo.int/pub/published_pct_sequences.
                                                                      Example 1: SEQ 1D 7666: 47pp: English.
                             developmental-specific genes
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Sequence 60 BP, 16 A: 20 G: 17 G: 13 T, 6 other;

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Conservative:
Mismatches:
Indels:
                        Matches:
                                                                   Gaps:
                                                                               US=09:856-070-25 (1-5) x ABN34918 (1-60)
                                                                                                                                                                 ABN4 3764 Standard; DNA; 60 BP.
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100.00%
100.00%
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                                                                                                                                                                                                            (first entry)
                                                                                                                THITTITITI
18 AFGCTCAGGCTTCAG 32
                                                                                                     1 MetLeuArgLeuGln 5
                                         Local Similarity:
                              Percent Similarity:
Aliqument Scores:
                                                                                                                                                                                                          15-JUL 2002
                                                                                                                                                                                     ABN4 1764;
                                                    Query Match:
                                                                                                                                             RESULT 6
                                                                                                                                                       ABN4 1764
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Human spliced transcript detection oligonucleotide SEQ ID NO:16512.
                                       Human: mouse; rat; splice transcript; detection; RNA transcript; splice variant; transcriptome; oligonucleotide library; ss.
                                                                                                                                      20-JUL-2001, 2601Wo-1B01903.
                                                                                                                                                          28-JUL-2000; 2000US-221607P.
02 MAY-2001, 20010S-2877.4F.
                                                                                            W0200210449-A2
                                                                         Homo sapiens
                                                                                                                 07-FEB-2002.
XXEX
XXEX
XXEX
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biological sample, in expression profitting studies, in qualitatively or quantitatively characterising the profitting studies, in qualitatively or detecting the corresponding transcriptome, and in transcripts and splice variants of human or animal transcriptomes. The libraries may also be used as specialised miniparticular biological or pathological state, and so allowing the particular biological or pathological state, and so allowing the only expressed in specific tissue under a specific pathological condition; to detect developmental specific genes such as those genes condition; to detect developmental specific genes; and to detect kNA from a particular disorder. ARN2753 to ABN59889 represent
                                                                   New oligonuclectide libraries comprising oligonucleotides which selectively hybridize to mRNAs transcribed from a transcription unit of a genome, useful for detecting tissue-, pathology-, and
                                                                                                                                                                                                                                                the present invention describes oligonucleotide libraties for detecting
                                                                                                                                                                                                                                                               messenger RNAs that populate a (sub-)transcriptome, where the (sub-)transcriptome comprises messenger RNAs transcribed from multiple transcription units that populate a genome. The library comprises sect of messenger RNAs transcribed from a given transcription unit the genome, which encodes one of more messenger RNAs transcribed from a given transcription unit of the genome, which encodes one of more messenger RNA splice variants. The oligonucleotide libraries are useful to detecting mRNAs from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   oligonucleotide sequences from rats, humans and mice, which are used in the exemplification of the present invention.

N.B. The sequence data for this patent did not form part of the printed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                           Example 1; SEQ ID 16512; 47pp; English.
                                                                                                                                               developmental-specific genes
                       WPI; 2002-257383/30.
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Sequence 60 BP; 15 A; 13 C; 15 G; 17 T; 0 other; Conservative: Mismatches: Matches: Length: Indels: 23.00 100.00**\$** 100.00**\$** 100.008 Best Local Similarity: Percent Similarity: Aliqument Scores: Query Match: Score:

840000 0

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US-09-856-070-25 (1-5) x ABN43764 (1-60)
                                                                                                                                                                                         Human gene signature HUMGS07270.
                                                                                                         AAT25114 Standard; DNA; 73 BP.
                                                                                                                                                               (first entry)
                                        1 MetLeuArgLeuGln 5
                                                                                                                                                             22-0CT-1996
                                                                                                                                  AAT25114;
                                                                                              AAF25114/C
                                                                              RESULT 7
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Gene signature; messenger RNA; mkNA; relative abundance; frequency; human; ctoning; mapping; non-biased library; diagnosis; detection; cell typing; abnormal cell function; ss. 94WO-JP01916. Homo sapiens. WC3514772-A1 11-NOV-1994; 01-JUN-1995.

Shoshan A, Wasserman A, Mintz E, Mintz L, Faigler S;

(COMP-) COMPUGEN INC.

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all the 3'-oriented conas hybridise with specific mRNAs. Each library is constructed so as to reflect accurately the relative abundance of
                                                                                                                                                                                                                                                                                      A single stranded DNA (or its complementary strand of the collesp, double-stranded DNA) which comprises one of the 7477 %ST sequences given in AAT10001-T2687 and which is able to hybridise to part of human genomic DNA. FDNA or mRNA is claimed. The GS (Gene Signature) sequences were obtained from 3'-directed cDNA libraties prepared from various human tissues, synthesis of cDNA was initiated from the 3'-end of mRNA by using Doiy(T) as the sole primer. Since the 3'-untranslated sequence is unique to a particular mRNA species, almost
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               different mRNAs in the particular tissue from which it was derived.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           peripheral acutopath), Lypertonaion, hypotension, mysloomppression,
retinopathy, inflammation, sensitisation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The appearance frequency of a given GS in a cDNA library can be determined (esp. using primers and probes derived from the GS sequences) as a means of diagnosing abnormal cell function or for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gene expression profile; hypersensitivity; SNA microarray,
liver toxicity; hepatitis; timour formation; immunosuppression;
renal toxicity; glomuleritis; neuroloxicity; leukaemin; domestia;
                                                                                                                                                           identifying gene signatures in 3' directed human cond library for diagnosis of abudimal pel' function, by proparing CDNA that reflects relative abundance of corresp. mRNA in specific human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 73 BP, 16 A, 17 C, 20 G, 18 T, 2 other,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative.
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps.
                                                                                                                                                                                                                                                       Claim 1; Page 1772; 2245pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gene expression profile sequence #15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-856-070-25 (1-5) x AAT25114 (1 73)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    recognising different cell types.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAS04515 standard; cDNA; 91 BP
 43 TP-0355504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-NOV-2000; 2000WG US10474
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MetLieuArgleuGln 5
                                                                                          Matsubara K, Okubo K;
                                    (MAIS/) MATSUBARA K.
                                                                                                                          WPI: 1995-206931/27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Bost Local Similarity:
Query Match:
                                                       (OKUHZ) OKUBO K.
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 12-Nav-1963;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAS04515;
                                                                                                                                                                                                                       tissues
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAS04515
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The sequence represents a cDNA from a gene associated with hyperscnsitivity to a agent, the sequence was detected in a sample by use of a FNA mirrorarray containing genes from a gene expression profile thought to be associated with hypersensitivity to an agent. The invention relates to methods of obtaining a gene expression profile of genes associated with hypersensitivity to an agent involving comparing the yene expression profile of cells treated with the agent with the gene expression profile of cells not treated with the agent, and determining the genes that have altered expression due to exposure to the agent Hypersensitivity in a subject can then be detected by comparing the gene expression profile of the subject with that associated with the gene expression profile of the subject with that associated with the hypersensitivity, usually by hybridisation of a sample of mkNA to the hypersensitivity profile. The years in the profiles are associated byth liver toxicity (e.g. hepatitis), tumour tormation,
                                                                                                                                                       Identifying hypersensitivity in a subject by obtaining a gene expression profile of hypersensitivity associated genes and detecting a produtefinised pattern of gene expression of hypersensitivity associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immenosappression, renai toxicity (e.g. glomaieiitis), neurotoxicity,
leukaemia, dementia, peripherai neuropathy, hyper/hypotension,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              livet towacity, impatitls; bullear tormation; ambutosuppression;
renal toxicity, glomaleritis; neurotoxicity, tenkaemia; dementia;
peripheral neuropathy, hypertension, hypotension, myelosuppression;
retinopathy; hnflammation; sensitisation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              myelosuppiession, ietinopathy, infiammation, and sensitisation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gene expression profile, hypersenditivity, DNA microarray,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 91 BP; 19 A; 33 C; 11 G; 28 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gene expression profile sequence #206.
                                     (PHAS:) PHASE-1 MOLECULAR TOXICOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-856-070-25 (1-5) x AAS04515 (1-91)
                                                                                                                                                                                                                                                          Claim 24; Fage 138; 222pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAS04706 standard; cDNA; 91 HP.
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11 AFR 2000; 20000S 0196571.
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100.00%
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23.00
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MetheuArgheuGln 5
                                                                                                                 WPT: 2001-328806/34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W0290132928-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
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hypersensitivity to a agent, the sequence was detected in a sample by use of a DNA microarray containing genes from a gene expression profile thought to be associated with hypersensitivity to an agent. The genes associated with hypersensitivity to an agent. The genes associated with hypersensitivity to an agent involving comparing the gene expression profile of cells treated with the agent, with the agent with the agent of the genes that have altered expression due to exposure to the agent. Hypersensitivity in a subject can then be detected by comparing the gene expression profile of the subject with that associated with the agent, and agent the genes that have altered expression due to exposure to the agent. Hypersensitivity in a subject can then be detected by comparing the agene expression profile of the subject with that associated with the agent with hypersensitivity, usually by hybridisation of a sample of mRNA.
                                                                                                                                                                                                                  Identitying hypersensitivity in a subject by obtaining a gene expression profile of hypersensitivity associated genes and detecting a prodetermined pattern of gene expression of hypersensitivity associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human, 5' EST; expressed sequence tag: secreted protein: cDNA isolation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 or cDNA from the subject to a DNA microarray containing genes from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 immunosuppression, renal toxicity (e.g. glomuleritis), neurotoxicity,
leukaemia, dementia, poripheral neuropathy, hyper/hypotension,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The genes in the profiles are associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          myelosuppression, retinopathy, inflammation, and sensitisation.
                                                                                                                                                                                                                                                                                                                                                                      The sequence represents a CDNA from a gene associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hypersensitivity profile. The genes in the profiles are with liver toxicity (e.g. hepatitis), tumour formation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91
0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 91 BP; 28 A; 11 C; 33 G; 19 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human secreted protein 5' EST, SEG ID NO: 18409.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     indels:
                                                                                    (PHAS-) PHASE 1 MOLECULAR TOXICOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qene therapy; chromosome mapping; ss.
                                                                                                                                                                                                                                                                                                                             Claim 24; Page 194; 222pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US 09-856-070-25 (1 5) x AAS04706 (1-91)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC14334 standard; cDNA; 103 BP.
                             8615-0165348
                                             11-APR-2000; 2000US:0196571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21:FEB-2000; 2000EP-0200610.
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                                                                                                                                                                           WPI: 2001 328806/14.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Aliqument Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens,
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                                                                                                                                    Farr S;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Onery Match:
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The present sequence is one of a large number of 5' ESTs derived from MRAs encoding secreted proteins. No opp has yet been conclusively identified within the present sequence. The 5' ESTs were prepared from fotal human RRAS or polyar RNAs edived from 8' different tissues. EST of the mRA because they are often obtained from oliqu-drip incd region (UTR) libraries. Such ESTs are not well suited from oliqu-drip prince obtained edived from the 5' ends of mRAS and even in those cases where longer 5' ESTs are derived from mRAS and even in those cases where longer 5' ESTs are derived from mRAS with intest 5' UTR is rarely included. S' ESTs are derived from mRAS with intest 5' cuits and can therefore be in diagnostic, forensic, gene therapy and chromosome mapping procedures.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
                                                                                                                       New nucleic acid that is a 5' expressed sequence tau (5' FST) for obtaining CDMs, and genomic DNAs that correspond to 5'ESTs and for diagnostic, forensic, gene therapy and chromosome mapping procedures
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 103 BP; 23 A; 25 C; 31 G; 24 T; 0 other;
                                                           Dumas Milne Edwards J, Duclert A, Giordano J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human secreted protein 5' EST, SEQ ID NO: 21160.
                                                                                                                                                                                  Claim 1; SEQ ID 18409; 71pp + CD-ROM; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dumas Milne Edwards J. Duclert A. Giordano J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HS-09-856-070-25 (1-5) x AAC14334 (1-103)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qene therapy; chromosome mapping; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                        expression and secretion vectors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAC17085 standard; cDNA; 112 BP.
   99US-0122487
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100.00%
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-0122487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-OCT-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MetheuArgheudin 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23 ATGCTGAGALIACAG 9
                                                                                           WPI; 2000-500381/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WP1; 2000-500381/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity:
                                (GEST ) GENSET
26-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GESI ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EP1033401-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-SEP-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAC17085;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAC17085/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
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New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining cDNAs and genemic DNAs that correspond to 5'ESTs and for diagnostic, forensic, gene therapy and chromosome mapping procedures

Claim 1; SEQ ID 21160; 71pp + CD-ROM; English

sequences usually correspond mainly to the 3' untranslated region (01k) of the mRNA because they are offern obtained from oilyou'll primed CDNA libraries. Such ESTs are not well sufferd for is they are not assert the superiors derived from the 5' ends of mRNAs and even in those cases where longer cDNA sequences have been obtained, the full 5' UTR is rately included. 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic, gene therapy and chromosome mapping procedures. They are used to obtain upstream regulatory sequences and to design The present sequence is one of a large number of 5° ESIs derived from mRNAs encoding serveral principa W. Opp has yet been conclusively identified within the present sequence. The 5° ESIs were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. ESI expression and secretion vectors

Sequence 112 BF: 16 A; 36 C; 27 G, 33 T, 9 other;

Conservative: Mismatches. Matches. · S [opul 100.00% 100.00% #UU 00 23.00 Percent Similarity: Best Local Similarity: Alignment Scores: Query Match: Pred. No.: Score:

88-04-856 076 25 (1-5) x AAC17085 (1-112)

45 ATGCTGAGGCTGCAG 31 1 MetLewArgLeuGln 5 ò

AAA45803 standard; cDNA; 112 BP. RESULT 12 AAA45803,

21-AHG-2000 (first entry) AAA45803;

Human secreted expressed sequence tag SEQ ID NO:2378.

Human; mouse; chicken; rat; secreted expressed sequence tag; sEST; expressed sequence taq. EST; probe; chemotaclic, prolitative; himmonomolialory, haematappietle; chemokinetic, analyssis; haemastatic; thrombolylic, artifullammatory, cytostatic; antibacterial; antifungat; antiviral; antidiabetic, antiauthmatic, vulnerary, antipatkinsonian; antiulcer; osteopathic, neurophotective, noctropic, antipsoriatio; verebruprovetive; anticonvulsant; antidepressant, gene therapy; vacilis, antidepressant, mailing belonges, alicities candition; insulin dependent diabetes; asthmas myeloid cell deliciency; ulcer; lymphold cell deliciency; burn; osteoperosis; osteoringius; central nervous system disorder; Alehalmer's disease; stroke; barkinson's disease; Huntington's disease; cagguation disorder; haemophilia; thrombosis; inflammatory disorder; Cronn's disease; tumour; infection; depression, psorfasis; ss.

Homo sapiens.

W0200021991 AI

15-001-1994;

9811S-0104436 15-00T-1998;

(GEMY) GENETICS INSTITUC.

Evens C: decoy JM, LaVallie ER, Collins-Racie LA, Treacy M, Bowman MR: MCCOY JM, Merberg D, Jacobs K,

WPI; 2000-317938/27

expressed sequence tags (SESIS), useful for treating various disorders such as autoimmune, infectious, and central nervous system disorders isolated polymodectides, and encoded proteins, comprising secreted

Claim 1, Page 775, 803pp; English.

(multiple scienosis, insulin dependent diabetes), allergic conditions (satina), included or imphoid cell deficiencies, wounds, burns, ulcers, osteopolosis, usteonthritis, central nervous system disorders discussifications, includes system disorders disorders frammophila, thrombosis, inflammatory disorders (Ctohn's disorders trammophila, thrombosis), inflammatory disorders (Ctohn's dispesse), tumours, bacterial, impal or viral infections, depression and psoriasis. AAA45926 to AAA45931 represent linker variants which are given molecules which correspond to the SESTS. Proteins encoded by the SESTS are useful in assays for determining biological activity and raising AAA43426 to AAA45925 tepresent specifically claimed secreted expressed sequence tags (SESTS), isolated from forms, mouse, chicken and fat tissue sources. The SESTS can have a tange of attivities depending on the tissues they were isolated from the activities include: chemotactic, proliferative; immunomodulatory; haematopoletic; chemotactic, proliferative; immunomodulatory; haematopoletic; chemotactic; natibacterial; antifungal; antiviral; antidiabetic; antibacterial; antifungal; antiviral; antidiabetic; noutropic; antiparkinsonian; antipsoriatic; cerebroprotective; noutropic; antiparkinsonian; antipsoriatic; cerebroprotective; authoraby and antidepressant. The SESTS can be used tor gene therapy and in vaccines. The SESTS are useful as probes for the identification and isolation of full-length cDNAs and genomic DNA antibodies. They may be useful for treatment of autoimmune disorders in the exemplification of the present invention.

Sequence 112 BP, 31 A; 24 C, 22 G, 35 T, 0 other;

Mismatches: Matches: Length. Indels: 23.00 100.00% 100.00% 100.00% Best Local Similarity: Percent Similarity: Aliqument Scores: Query Match: Score:

US-09-856-070-25 (1-5) x AAA45803 (1-112)

1 MetieuArgLeuGln 5

ABK76832

RESULT 13

ABK76832 standard; DNA; 129 BP.

ABK 75832;

13-AUG-2002 (first entry)

Bacillus licheniformis genomic sequence tag (GSI) #4123.

Differential gene expression; genomic sequenced taq; GST; altered culture condition; environmental stress; physiological provocation; ds.

Bacillus licheniformis.

W0200229113-A2.

11-APR-2002.

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isolated from Macillus cells to a substrate containing array of Bacillus genomic sequenced tags (GST), examining the array, and determining relative gene expression by an observed Mybridistation reporter siqual of a spot in the array. The method is useful for measuring the expression of genes in a first Bacillus cell relative to expression of the same genes in one or more second Bacillus cells. The method is useful for monitoring global expression of several genes from a Bacillus cell, discovering new genes, identifying possible functions of unknown open reading frames and monitoring gene copy number variation and stability. Monitoring changes
                                                                                                                                                                                                                                                                                                                                                                                                                                          genes in a first Macillus cell relative to expression of the genes in other Macillus cells, comprising hybridising labelled nucleic acid probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      in expression of genes may be used to provide a representation of the way in which Bacillus cells adapt to changes in culture conditions, environmental stress or other physiological provocation. Extensive follow-up characterisation is unnecessary, when one spot on an array equals one quen or one open relating luame, since sequence intornation is available. This sequence represents a genomic sequence tag (GST) used in
                                                                                                                                                                                                                                                                                                                                                                                                                      The invention describes a method of monitoring differential expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WITO
                                                                                                                                                                                                                                                                Monitoring differential expression of several genes in first Bacillus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; colon cancer; colon cancer antiqen, diagnosis, detection,
                                                                                                                                                                                                                                                                                     cell relative to expression of same genes in one or more second
Barillus cells, by using substrate containing Macillus genemic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human colon canger antigen encoding gDNA SEQ ID NO:4159.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 129 BP; 27 A; 40 C; 29 G; 33 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative.
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tip.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                          Claim 4; SFQ IP No 4123; 200pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-856-070-25 (1-5) x ABK76832 (1-129)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH 47077 standard; cDNA; 134 BP.
                                                                                                           (NOVO ) NOVOZYMES BIOTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the method of the invention.
05-00T-2001; 2001W0-US+14+7
                                           06 OCT-2000; 2000US-0680598.
                                                                27 MAR 2001; 2001HS-274526P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100 00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            colorecta! carcinoma; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66 ALGETACCACTICAA 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MetLeuArgLeuGln 5
                                                                                                                                                                            Herka R, Clausen 10;
                                                                                                                                  (NOVO ) NOVOZYMES AS.
                                                                                                                                                                                                                     WPI; 2002-416684/44.
                                                                                                                                                                                                                                                                                                                                   sequenced tag array
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Aliqument Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH37077;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Prod. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAH 470777C
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cancer-associated nucleic acid molecules (N) and proteins (P), where the proteins are collectively known as colon cancer antiqens. The colon cancer antiqens have cytostatic acilivity and can be used in quene therapy and vaccine production. N and P may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate P expression. For example, N and P may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of P by expressing inactive proteins or to supplement the patients own production of P. Additionally. N may be used to produce the colon cancer associated Ps. by isserting the nucleic acids into a host cell and culturing the cell to express the proteins. N and P can be used in the prevention, diagnosis and Irealment of colorectal cand cancers. Anishive to AMIB3204 and AMB7789 represent sequences used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                          Nucleic acids encoding 4277 haran colon cancer associated polypeptides, useful for preventing, diagnosing and/or treating colorectal cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Probe #13542 for gene expression analysis in human heart cell sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                missing at time of publication, meaning no sequences are present for SEQ ID NO-1027 \pm \sigma 1052, 7421 and 7922.
                                                                                                                                                                                                                                                                                                                                                                                                                                           AAH32943 to AAH37195 and AAG73514 to AAG77788 represent human colon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, gene expression, heart, microarray, vascular system; probe, cardiovascular disease; hypertension; cardiac arrhythmia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          present invention.
N.B. Pages 666 to 682 and page 7053 of the sequence listing were
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 134 BP; 39 A; 33 C; 35 G; 19 I; 8 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches:
                                                                                                                                                                                                                                         Rosen CA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-856-070-25 (1-5) x AAH37077 (1-134)
                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 6010; 9803pp; English.
                                                                                                                                                                                                                                         Ruben SM, Barash SC, Birse CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABA35126 standard; DNA; 139 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        congenital heart disease; ss.
                                                                                                                                                                                                 (HUMA-) HUMAN GENOME SCI INC
                                                                                                28-SEP-2010; 2000W0-US265.14.
                                                                                                                                      9905-0157137.
9905-0163280.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-JAN-2002 (first cntry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 ATGCTCCGTCTTCAG 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 Met.LeuArgLeuGln 5
                                                                                                                                                                                                                                                                             WP1; 2001-235357/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local similarity:
Query Match:
                                                                                                                                                                                                                                                                                                P-PSDB; AAG77670.
                WO200122920-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                      29-SEP-1999;
                                                                                                                                                           03-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                        05-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABA35126;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABA35126
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The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart. The present sequence is one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring yene expression, the probes are useful for predicting, diagnosing, quading, staging, monitoring and proquosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WiPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                             139
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0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 139 BP; 42 A; 36 C; 23 G; 38 T; 0 other;
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Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
                                                                                                                                                                                                                                                                                                                                                                           Claim 4; SEQ ID No 13592; 530pp; English.
                                                                                                                                                                                                                                                                  Penn SG, Hanzel DK, Cher. W, Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-856-070-25 (1-5) x ABA35126 (1-139)
                                                                                                                                                                                                                                   (MOLE-) MOLECULAR DYNAMICS INC.
                                                                                                    04 - FFB- 2000; 2000US-0180312, 26 - MAY - 2000; 2000US-020456, 30 - JUN - 2000; 2000US-068408, 01 - AUG - 2000; 2000US-053256, 21 - SEP - 2000; 2000US-0234687, 27 - SEP - 2000; 2000US-0234687, 04 - OCT - 2000; 2000US-023456
                                                                          30-JAN-2001; 2001W0-USUU666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23.00
100.00*
100.00*
                                                                                                                                                                                                                                                                                                WPI; 2001-488899/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
              WO200157274-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
Pred. No.:
                                            09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
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Search completed: January 16, 2003, 17:19:52 Job time : 82.9821 secs

